

Utah Health Status Update: Infectious Diseases (Part 3)

June 1998

Utah Department of Health

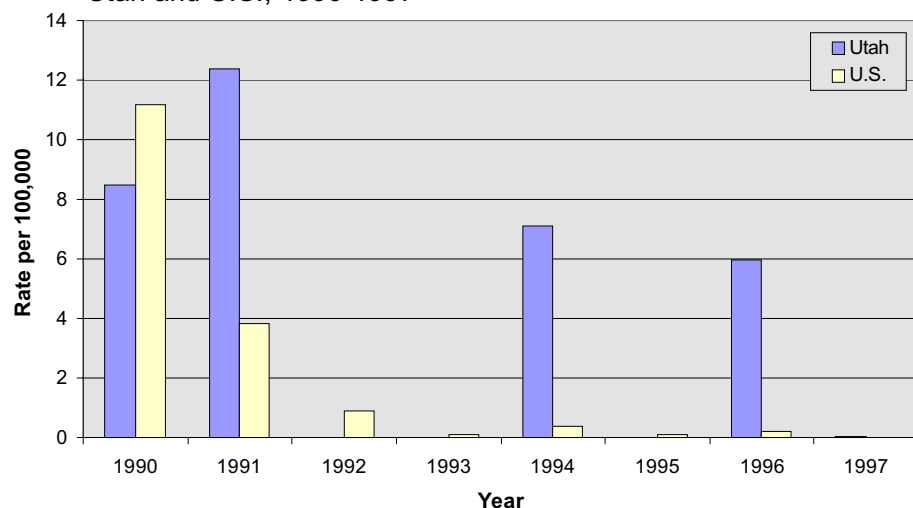
This report is the last of a three-part series devoted to infectious diseases in Utah and covers vaccine-preventable diseases.

Vaccine Preventable Diseases in Utah 1990 to 1997

- Four vaccine preventable childhood diseases are of primary public health interest in Utah: measles (rubeola), rubella (German measles), pertussis, and invasive *Haemophilus influenzae*. Other important vaccine preventable diseases (polio, diphtheria, tetanus) are rare in Utah.
- Measles (rubeola) has been a concern in Utah. Cases were reported during five of the past eight years, typically resulting in outbreaks of over 100 cases. Measles can be very serious; preventing it through vaccination is a necessary public health strategy.
- Rubella (German measles) is usually a mild rash illness, but it can cause congenital rubella syndrome (CRS) in up to 90% of infants born to women who acquired rubella during the first trimester of pregnancy. Incidence of rubella can be used as a rough indicator of whether children are being vaccinated for mumps, measles, and rubella.
- Pertussis (whooping cough) has been decreasing over the last few years, but enough cases are reported every year in Utah to be of concern. Pertussis is most common in children less than two years of age, usually before they are fully immunized against it. These young patients often require hospitalization.
- *Haemophilus influenzae b* invasive disease can cause mortality or severe sequelae. Widespread immunization of children has led to a decline in the number of cases in both Utah and the U.S.

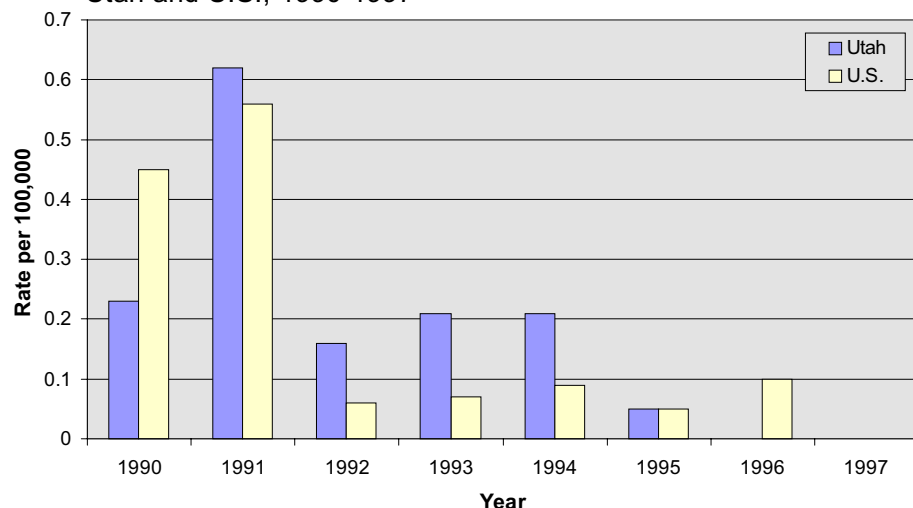
Measles (Rubeola)

Rate per 100,000 persons of reported Measles, Utah and U.S., 1990-1997



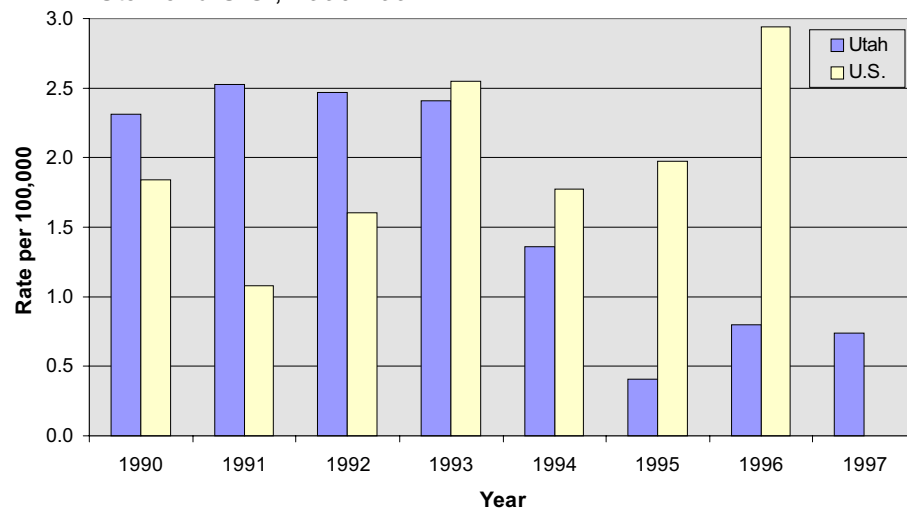
Rubella (German Measles)

Rate per 100,000 persons of reported Rubella, Utah and U.S., 1990-1997



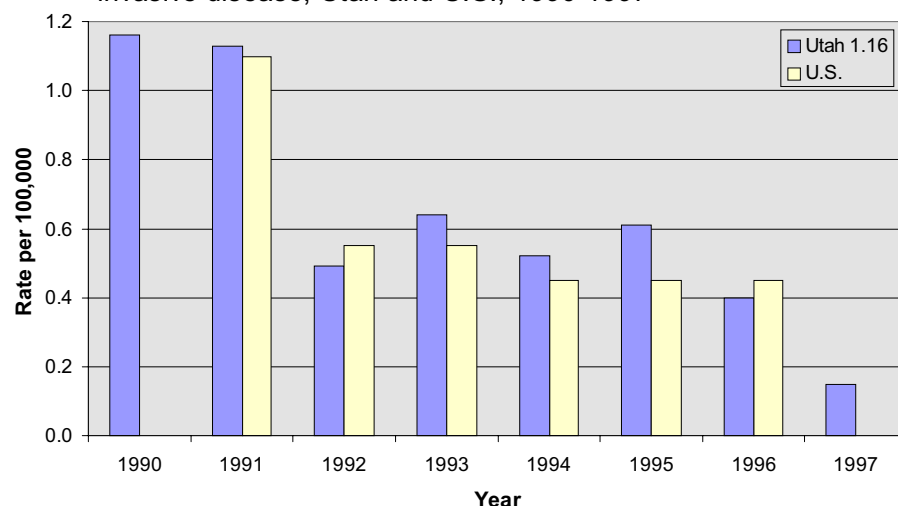
Pertussis

Rate per 100,000 persons of reported Pertussis, Utah and U.S., 1990-1997



Haemophilus Influenzae, Invasive Disease

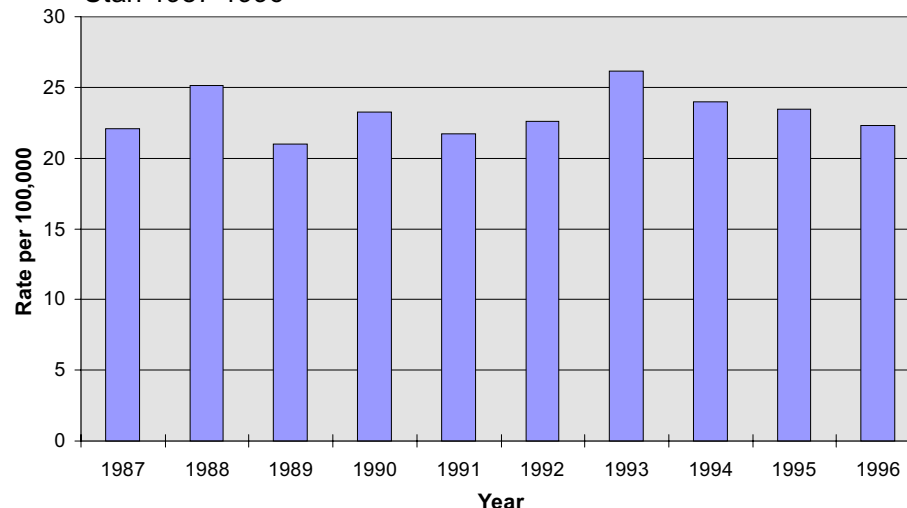
Rate per 100,000 persons of reported *Haemophilus influenzae b* invasive disease, Utah and U.S., 1990-1997



- Vaccine preventable diseases of concern to adults include bacterial pneumonia and influenza.
- Bacterial pneumonia and influenza are leading causes of death among adults in Utah. In 1995 over 6,500 persons were hospitalized for bacterial pneumonia or influenza, with hospital charges exceeding \$52 million. Influenza vaccine is recommended annually for all persons age 65 and older, and for others at high risk.

Pneumonia and Influenza Deaths

Deaths from pneumonia and influenza per 100,000 persons, Utah 1987-1996



Utah's immunization rates are low; some reasons include large family sizes, parents' lack of awareness of their child's status, delaying immunization because a child has a mild illness or is on antibiotics, physicians' lack of immunization assessment at each doctor visit, and lack of good tracking systems in the health system and at individual physicians' practices.

The two-year-old immunization rate is one of the measures reported by HMOs to HEDIS (Health Plan Employer Data and Information Set) for use in evaluating health plans. In 1997, all of Utah's HMOs are required to report HEDIS measures for their Medicaid and commercial populations. The lack of a statewide immunization tracking system results in under-reporting of HMO HEDIS immunization rates.

Utah's Statewide Immunization Information System (USIIS) is currently being expanded in hopes of addressing the needs for a comprehensive immunization tracking system. Other prevention activities include a media campaign and an *Every Child by Two* Task Force chaired by Utah's First Lady, Jacalyn Leavitt.

PERCENT ADEQUATELY IMMUNIZED			
	Two-year-olds Utah	Two-year-olds U.S.	Utah School Enterers (kindergarten)
1990	38.20%	N/A	92.10%
1991	36.50%	N/A	93.00%
1992	41.30%	N/A	93.90%
1993	46.50%	N/A	93.50%
1994*	49.3%/57.7%/70.0%	75%	95.10%
1995	68%	76%	95.00%
1996	64%	78%	95.10%
1997	69%**	78%**	95.00%

* Retrospective Survey/University of Utah Survey-Population Based/CDC, National Immunization Survey April 1994-Dec. 1994

** National Immunization Survey-Population Based; Interim results for the period July 1996-June 1997.

Note: Unless otherwise specified, two-year-old immunization rates from 1994-1997 are based on the National Immunization Survey.

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Additional information about this topic is available from the Bureau of Epidemiology, Utah Department of Health, P O Box 142104, Salt Lake City, Utah 84114-2104, (801) 538-6191, FAX (801) 538-9923, or email: cnichols@doh.state.ut.us, the Immunization Program, Utah Department of Health, P O Box 142001, Salt Lake City, Utah 84114-2001, (801) 538-9450, FAX (801) 538-9440, email: rcrankshaw@doh.state.ut.us, or their homepage at <http://www.health.state.ut.us>, or from the Office of Public Health Data, (801) 538-6108, FAX (801) 538-7053, or email: phdata@doh.state.ut.us.



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